

s/n: 09/939,422
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7	(feedback with coil) and (((micro\$2mirror or ((micro adj electr\$4 adj mechanic\$4) same (mirror or reflect\$5)) or (digital adj micro\$4 adj mirror) or DMD)) and (electr\$5magnet\$5))	USPAT; US-PGPUB; IBM_TDB	7/10/04 13
6534	(micro\$2mirror or ((micro adj electr\$4 adj mechanic\$4) same (mirror or reflect\$5)) or (digital adj micro\$4 adj mirror) or DMD)	USPAT; US-PGPUB; IBM_TDB	7/10/04 13
1166	((micro\$2mirror or ((micro adj electr\$4 adj mechanic\$4) same (mirror or reflect\$5)) or (digital adj micro\$4 adj mirror) or DMD)) and (electr\$5magnet\$5)	USPAT; US-PGPUB; IBM_TDB	7/10/04 13
328735	(mirror or micro\$2mirror or (micro adj electr\$4 adj mechanic\$4) or (digital adj micro\$4 adj mirror) or DMD)	USPAT; US-PGPUB; IBM_TDB	7/10/04 13
9536	(micro\$2mirror or (micro adj electr\$4 adj mechanic\$4) or (digital adj micro\$4 adj mirror) or DMD)	USPAT; US-PGPUB; IBM_TDB	7/10/04 13
1654	coil same magnet same (mirror or micro\$2mirror or (micro adj electr\$4 adj mechanic\$4) or (digital adj micro\$4 adj mirror) or DMD)	USPAT; US-PGPUB; IBM_TDB	7/10/04 13
32	feedback with (excitation adj coil)	USPAT; US-PGPUB; IBM_TDB	7/10/04 13
5679	feedback with coil	USPAT; US-PGPUB; IBM_TDB	7/10/04 13
2	((359/239).CCLS.) and (feedback with coil)	USPAT; US-PGPUB; IBM_TDB	7/10/04 13
2	(feedback with (excitation adj coil)) and mirror	USPAT; US-PGPUB; IBM_TDB	7/10/04 13
89	(359/239).CCLS.	USPAT; US-PGPUB; IBM_TDB	7/10/04 13
0	(feedback with (excitation adj coil)) and magnte\$5	USPAT; US-PGPUB; IBM_TDB	7/10/04 13
25	feedback same angle same deflection same coil	USPAT; US-PGPUB; IBM_TDB	3/19/04 15
317	feedback same angle same deflection	USPAT; US-PGPUB; IBM_TDB	3/19/04 15
120	(feedback same angle same deflection) and (mirror or micro\$2mirror or (micro adj electr\$4 adj mechanic\$4) or (digital adj micro\$4 adj mirror) or DMD)	USPAT; US-PGPUB; IBM_TDB	3/19/04 15
12	(feedback same angle same deflection) and (micro\$2mirror or (micro adj electr\$4 adj mechanic\$4) or (digital adj micro\$4 adj mirror) or DMD)	USPAT; US-PGPUB; IBM_TDB	3/19/04 15
88	((feedback same angle same deflection) and (mirror or micro\$2mirror or (micro adj electr\$4 adj mechanic\$4) or (digital adj micro\$4 adj mirror) or DMD)) not 359/\$.ccls.	USPAT; US-PGPUB; IBM_TDB	3/19/04 15
3	((338/47).CCLS.) and torsion and angle	USPAT; US-PGPUB; IBM_TDB	3/19/04 15
1	("5648618").PN.	USPAT; US-PGPUB; IBM_TDB	3/19/04 15
177	(338/47).CCLS.	USPAT; US-PGPUB; IBM_TDB	3/19/04 15
6	6392220.URPN.	USPAT	3/19/04 11
51	5648618.URPN.	USPAT	3/19/04 11
1	("6580846").PN.	USPAT; US-PGPUB; IBM_TDB	3/19/04 10
1	("6044705").PN.	USPAT; US-PGPUB; IBM_TDB	3/19/04 10
5	("4365863" "5524153" "6097858" "6210401" "6344912").PN.	USPAT	3/19/04 10
0	6580846.URPN.	USPAT	3/19/04 10
30	(magnet\$5 adj actuator) and micromirror	USPAT; US-PGPUB; IBM_TDB	3/19/04 10
4	6181460.URPN.	USPAT	3/19/04 10
10	((("4479388") or ("5283491") or ("5606447") or ("5644177") or ("5867302") or ("6028689") or ("6094293") or ("6300733") or ("6369400") or ("6483962")).PN.	USPAT; US-PGPUB; IBM_TDB	3/19/04 10
1	("5778513").PN.	USPAT; US-PGPUB; IBM_TDB	3/19/04 10
0	6369400.URPN.	USPAT	3/19/04 10
1	6313905.PN.	USPAT	3/19/04 10
28	(array near2 mirror) and gimbal and coils and magnets	USPAT; US-PGPUB; IBM_TDB	3/19/04 10
31	5969465.URPN.	USPAT	3/9/04 15
23	5543956.URPN.	USPAT	3/9/04 15
7	5107366.URPN.	USPAT	3/9/04 15
486	electromagnetic same magnet same (mirror or micro\$2mirror or (micro adj electr\$4 adj mechanic\$4) or (digital adj micro\$4 adj mirror) or DMD or pixel)	USPAT; US-PGPUB; IBM_TDB	3/9/04 15

64	((359/223-226,290-291,295,298,302,315,318,850,871,872,877) or (345/55,85,108,111)).CCLS.) and (electromagnetic same magnet same (mirror or micro\$2mirror or (micro adj electr\$4 adj mechanic\$4) or (digital adj micro\$4 adj mirror) or DMD or pixel))	USPAT; US-PGPUB; IBM_TDB	3/9/04 15
61	((359/223-226,290-291,295,298,302,315,318,850,871,872,877) or (345/55,85,108,111)).CCLS.) and (electromagnetic same magnet same (mirror or micro\$2mirror or (micro adj electr\$4 adj mechanic\$4) or (digital adj micro\$4 adj mirror) or DMD or pixel))) and coil\$3	USPAT; US-PGPUB; IBM_TDB	3/9/04 15
411991	(digital adj micro\$4 adj mirror) or DMD or pixel)	USPAT; US-PGPUB; IBM_TDB	3/9/04 15
25	((((mirror or micro\$2mirror or (micro adj electr\$4 adj mechanic\$4) or (digital adj micro\$4 adj mirror) or DMD or pixel)) and (feedback with deflection with detect\$5)) and mirror) and magnet	USPAT; US-PGPUB; IBM_TDB	3/9/04 15
108	((mirror or micro\$2mirror or (micro adj electr\$4 adj mechanic\$4) or (digital adj micro\$4 adj mirror) or DMD or pixel)) and (feedback with deflection with detect\$5)	USPAT; US-PGPUB; IBM_TDB	3/9/04 15
94	((mirror or micro\$2mirror or (micro adj electr\$4 adj mechanic\$4) or (digital adj micro\$4 adj mirror) or DMD or pixel)) and (feedback with deflection with detect\$5)) and mirror	USPAT; US-PGPUB; IBM_TDB	3/9/04 15
22	((mirror or micro\$2mirror or (micro adj electr\$4 adj mechanic\$4) or (digital adj micro\$4 adj mirror) or DMD or pixel)) and (feedback with angular with deflection)	USPAT; US-PGPUB; IBM_TDB	3/9/04 15
464	((mirror or micro\$2mirror or (micro adj electr\$4 adj mechanic\$4) or (digital adj micro\$4 adj mirror) or DMD or pixel)) and (feedback with deflection)	USPAT; US-PGPUB; IBM_TDB	3/9/04 15
15	("4229081" "4317611" "4580873" "4725127" "5042889" "5216490" "5579148" "5729642" "5808780" "5912608" "5923798" "5956292" "6005993" "6031947" "6049404").PN.	USPAT	3/9/04 14
6	6388789.URPN.	USPAT	3/9/04 14
1	("5912608").PN.	USPAT; US-PGPUB; IBM_TDB	3/9/04 14
1	("5629790").PN.	USPAT; US-PGPUB; IBM_TDB	3/9/04 14
30	6201629.URPN.	USPAT	3/9/04 13
2	("5606447" "5912608").PN.	USPAT	3/9/04 13
0	6122089.URPN.	USPAT	3/9/04 13
34	((mirror or micro\$2mirror or (micro adj electr\$4 adj mechanic\$4) or (digital adj micro\$4 adj mirror) or DMD or pixel)) and ((electro\$2magnetic adj actuator) same (permanent adj magnet))) and array	USPAT; US-PGPUB; IBM_TDB	3/9/04 13
16	5912608.URPN.	USPAT	3/9/04 13
353	((electro\$2magnetic adj actuator) same (permanent adj magnet) ((mirror or micro\$2mirror or (micro adj electr\$4 adj mechanic\$4) or (digital adj micro\$4 adj mirror) or DMD or pixel)) and	USPAT; US-PGPUB; IBM_TDB	3/9/04 13
79	((electro\$2magnetic adj actuator) same (permanent adj magnet))	USPAT; US-PGPUB; IBM_TDB	3/9/04 13
15	((359/223-226,290-291,295,298,302,315,318,850,871,872,877) or (345/55,85,108,111)).CCLS.) and (((micro\$2mirror or ((micro adj electr\$4 adj mechanic\$4) with mirror) or (digital adj micro\$4 adj mirror) or DMD or pixel)) and (electro\$2magnetic adj actuator))	USPAT; US-PGPUB; IBM_TDB	3/9/04 13
122	((micro\$2mirror or ((micro adj electr\$4 adj mechanic\$4) with mirror) or (digital adj micro\$4 adj mirror) or DMD or pixel)) and (electro\$2magnetic adj actuator)	USPAT; US-PGPUB; IBM_TDB	3/9/04 13
127347	(micro\$2mirror or ((micro adj electr\$4 adj mechanic\$4) with mirror) or (digital adj micro\$4 adj mirror) or DMD or pixel)	USPAT; US-PGPUB; IBM_TDB	3/9/04 13
4537	(digital adj micro\$4 adj mirror) or DMD or pixel)	USPAT; US-PGPUB; IBM_TDB	3/9/04 13
15	electro\$2magnetic adj actuator	USPAT	3/9/04 11
3	("4229732" "4441791" "5172262" "5311360" "5517359" "5610757" "5661592" "5748172" "5768009" "5867302" "5926309" "5999303" "6025951" "6028689" "6445502" "2001/0028756" "2002/0031305").PN.	USPAT	3/9/04 11
	3 ("4421381" "5629790" "5748172").PN.	USPAT	3/9/04 11

16 Asada-Norihiro.in. and mirror	EPO; JPO	3/9/04 11
1 ("5748172").PN.	USPAT; US-PGPUB; IBM_TDB	3/9/04 11
1	50950 EPO; JPO	3/9/04 11
66 Asada-Norihiro.in.	EPO; JPO	3/9/04 11
1 WO00/50950	USPAT; US-PGPUB; IBM_TDB	3/9/04 11
0 WO00/50950	EPO; JPO	3/9/04 11
13 ((345/111).CCLS.) and mirror	USPAT; US-PGPUB; IBM_TDB	3/9/04 11
6 5748172.URPN.	USPAT	3/9/04 11
108 (345/111).CCLS.	USPAT; US-PGPUB; IBM_TDB	3/9/04 10
((359/223-226,290-291,295,298,302,315,318,850,871,872,877) or		
(345/55,85,108,111)).CCLS.) and ((mirror or micro\$2mirror or (micro		
adj electr\$4 adj mechanic\$4) or (digital adj micro\$4 adj mirror) or DMD		
3964 or pixel))	USPAT; US-PGPUB; IBM_TDB	3/9/04 10
("5498312" "5606447" "6295154" "6430332" "2001/0022682"		
"2002/0018615" "2002/0034024" "2002/0034026" "2002/0070335"		
4 "2002/0074310" "2002/0075553" "2002/0118429").PN.	USPAT	3/9/04 10
(mirror or micro\$2mirror or (micro adj electr\$4 adj mechanic\$4) or		
315435 (digital adj micro\$4 adj mirror) or DMD)	USPAT; US-PGPUB; IBM_TDB	3/9/04 10
(micro\$2mirror or ((micro adj electr\$4 adj mechanic\$4) with mirror) or		
31071 (digital adj micro\$4 adj mirror) or DMD or pixel) with array	USPAT; US-PGPUB; IBM_TDB	3/9/04 10
((micro\$2mirror or ((micro adj electr\$4 adj mechanic\$4) with mirror) or		
(digital adj micro\$4 adj mirror) or DMD) with array) and ((coil or winding)		
39 same magnet)	USPAT; US-PGPUB; IBM_TDB	3/9/04 10
((359/223-226,290-291,295,298,302,315,318,850,871,872,877) or		
(345/55,85,108,111)).CCLS.) and ((micro\$2mirror or ((micro adj		
electr\$4 adj mechanic\$4) with mirror) or (digital adj micro\$4 adj mirror)		
677 or DMD or pixel) with array)	USPAT; US-PGPUB; IBM_TDB	3/9/04 10
((coil or winding) same (array near2 magnet)) and (((359/223-226,290-		
291,295,298,302,315,318,850,871,872,877) or		
(345/55,85,108,111)).CCLS.) and ((micro\$2mirror or ((micro adj		
electr\$4 adj mechanic\$4) with mirror) or (digital adj micro\$4 adj mirror)		
0 or DMD or pixel) with array))	USPAT; US-PGPUB; IBM_TDB	3/9/04 10
((coil or winding) same (array near2 magnet)) and (((micro\$2mirror or		
((micro adj electr\$4 adj mechanic\$4) with mirror) or (digital adj micro\$4		
0 adj mirror) or DMD) with array) and ((coil or winding) same magnet))	USPAT; US-PGPUB; IBM_TDB	3/9/04 10
((359/223-226,290-291,295,298,302,315,318,850,871,872,877) or		
(345/55,85,108,111)).CCLS.) and ((micro\$2mirror or ((micro adj		
electr\$4 adj mechanic\$4) with mirror) or (digital adj micro\$4 adj mirror)		
21 or DMD or pixel) with array)) and ((coil or winding) same magnet)	USPAT; US-PGPUB; IBM_TDB	3/9/04 10
4308 (359/223-226,290-291,295,298,302,315,318,850,871,872,877).CCLS.	USPAT; US-PGPUB; IBM_TDB	3/9/04 10
(micro\$2mirror or ((micro adj electr\$4 adj mechanic\$4) with mirror) or		
1640 (digital adj micro\$4 adj mirror) or DMD) with array	USPAT; US-PGPUB; IBM_TDB	3/9/04 10
((359/223-226,290-291,295,298,302,315,318,850,871,872,877) or		
4992 (345/55,85,108,111)).CCLS.	USPAT; US-PGPUB; IBM_TDB	3/9/04 10
638 (coil or winding) same (array near2 magnet)	USPAT; US-PGPUB; IBM_TDB	3/9/04 10
((coil or winding) same (array near2 magnet)) and ((micro\$2mirror or		
((micro adj electr\$4 adj mechanic\$4) with mirror) or (digital adj micro\$4		
0 adj mirror) or DMD) with array)	USPAT; US-PGPUB; IBM_TDB	3/9/04 10
((coil or winding) same (array near2 magnet)) and ((micro\$2mirror or		
((micro adj electr\$4 adj mechanic\$4) with mirror) or (digital adj micro\$4		
14 adj mirror) or DMD or pixel))	USPAT; US-PGPUB; IBM_TDB	3/9/04 10

127345	((micro\$2mirror or ((micro adj electr\$4 adj mechanic\$4) with mirror) or (digital adj micro\$4 adj mirror) or DMD or pixel)) not (((359/223-226,290- 291,295,298,302,315,318,850,871,872,877).CCLS.) and ((mirror or micro\$2mirror or (micro adj electr\$4 adj mechanic\$4) or (digital adj micro\$4 adj mirror) or DMD)) and ((coil or winding) same (array near2 magnet)))	USPAT; US-PGPUB; IBM_TDB	3/9/04 10
12	(((coil or winding) same (array near2 magnet)) and ((micro\$2mirror or ((micro adj electr\$4 adj mechanic\$4) with mirror) or (digital adj micro\$4 adj mirror) or DMD or pixel))) not (((359/223-226,290- 291,295,298,302,315,318,850,871,872,877).CCLS.) and ((mirror or micro\$2mirror or (micro adj electr\$4 adj mechanic\$4) or (digital adj micro\$4 adj mirror) or DMD)) and ((coil or winding) same (array near2 magnet)))	USPAT; US-PGPUB; IBM_TDB	3/9/04 10
3	((359/223-226,290-291,295,298,302,315,318,850,871,872,877).CCLS.) and ((mirror or micro\$2mirror or (micro adj electr\$4 adj mechanic\$4) or (digital adj micro\$4 adj mirror) or DMD)) and ((coil or winding) same (array near2 magnet))	USPAT; US-PGPUB; IBM_TDB	3/9/04 10
52	(coil same magnet same (mirror or micro\$2mirror or (micro adj electr\$4 adj mechanic\$4) or (digital adj micro\$4 adj mirror) or DMD or (spatial adj light adj modulator) or SLM)) and (array near2 magnets)	USPAT; US-PGPUB; IBM_TDB	3/9/04 10
1	6144119.URPN.	USPAT	3/9/04 8
10	("3851196" "4555650" "4654571" "5153494" "5196745" "5334892" "5528118" "5623853" "5715037" "5773837").PN.	USPAT	3/9/04 8
104	(coil same magnet same (mirror or micro\$2mirror or (micro adj electr\$4 adj mechanic\$4) or (digital adj micro\$4 adj mirror) or DMD or (spatial adj light adj modulator) or SLM)) and (inner same outer same frame)	USPAT; US-PGPUB; IBM_TDB	3/9/04 8
1	((coil same magnet same (mirror or micro\$2mirror or (micro adj electr\$4 adj mechanic\$4) or (digital adj micro\$4 adj mirror) or DMD or (spatial adj light adj modulator) or SLM)) and (inner same outer same frame)) and (array near2 magnets)	USPAT; US-PGPUB; IBM_TDB	3/9/04 8
115	(coil same magnet same (mirror or micro\$2mirror or (micro adj electr\$4 adj mechanic\$4) or (digital adj micro\$4 adj mirror) or DMD or (spatial adj light adj modulator) or SLM)) and gimbal	USPAT; US-PGPUB; IBM_TDB	3/9/04 8
1658	coil same magnet same (mirror or micro\$2mirror or (micro adj electr\$4 adj mechanic\$4) or (digital adj micro\$4 adj mirror) or DMD or (spatial adj light adj modulator) or SLM)	USPAT; US-PGPUB; IBM_TDB	3/9/04 8
8	((coil same magnet same (mirror or micro\$2mirror or (micro adj electr\$4 adj mechanic\$4) or (digital adj micro\$4 adj mirror) or DMD or (spatial adj light adj modulator) or SLM)) and gimbal) and (array with magnets)	USPAT; US-PGPUB; IBM_TDB	3/9/04 8